

Summary of: Managing patients on bisphosphonates: The practice of primary care dentists before and after the publication of national guidance

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VERIFIABLE CPD PAPER

FULL PAPER DETAILS

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Background In April 2011 the Scottish Dental Clinical Effectiveness Programme published the *Oral health management of patients prescribed bisphosphonates* guidance document. The aims of this study were to examine whether dentists' practice and beliefs changed after guidance publication to determine whether a knowledge translation intervention was required, and to inform its development. **Methods** Three postal surveys sent to three independent, random samples of dentists throughout Scotland pre- and post-guidance publication. The questionnaire, framed using the theoretical domains framework (TDF), assessed current practice and beliefs relating to recommended management of patients on bisphosphonates. **Results** The results (N = 420) suggest that any significant impact the guidance may have had on the recommended management of patients on bisphosphonates by primary care dentists, had reached its peak ten months post publication. A more positive attitude, greater perceived ability, and greater motivation were all associated with significantly more performing of all recommended behaviours at every time point. **Conclusions** Prior to this study, there was little available information about how patients on bisphosphonates were being managed in primary dental care, or what beliefs may be influencing management decisions. This study was able to identify levels of compliance pre- and post-guidance publication and determine that further intervention was necessary to enable sustained uptake of recommendations. Using the TDF to identify beliefs associated with best practice made it possible to suggest theoretically informed strategies for service improvement. The next step is to test the intervention(s) in a randomised controlled trial.

EDITOR'S SUMMARY

The changing nature of our knowledge of disease processes, our application of treatments and our management of patients affected by established and emerging conditions means that as clinicians we have to have a heightened awareness of the possible consequences to our patients.

Growing observation in recent years of the osteonecrotic potential of the anti-cancer drugs in the bisphosphonate family lead to the formulation of guidance published in April 2011 by the Scottish Dental Clinical Effectiveness Programme. However, as this paper sets out to examine, the extent to which the issuing of guidance actually alters behaviour and change in practice is a whole matter in itself. Perhaps there is a parallel with our issuing of guidance on oral health routines to our patients.

In order to test the extent to which the guidance has been implemented and sustained, this study used postal surveys to

a randomised sample of dentists. Given human nature, the pattern that emerged represents what might be expected in a spread of activity. This ranged from very little awareness and compliance through to consistent and sustained adoption of the guidance via the grey areas between. Importantly, the study identified that the peak of compliance occurred at 10 months after the publication of the guidance.

The trotting out of the fact that as a society we have a growing proportion of older people of greater longevity and that their needs as far as healthcare is concerned are more complex, as are their medical histories, is familiar to us all. But that is also significant here, for the number of times of repetition, extent and reinforcement of the message means that we are all sensitised to it. In contradistinction this seems not to be the case with the bisphosphonate guidance. So the issue arises as to how to continue to remind the busy prac-

itioner about this also increasing, clinical imperative. There are no easy answers but the general point about updating knowledge on new and developing drugs, therapies and treatments which have oral significance has to be tackled if we are to maintain the high level of trust that our patients invest in us. Surely targeted continuing professional development would be a key ingredient?

Readers often wish for a succinct take-home message from research. There is one here, as captured perfectly by our Commentary writer (opposite) 'the responsibility has not been accepted but I cannot see how it can be avoided in future'. NB!

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 217 issue 12.

Stephen Hancocks

Editor-in-Chief

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IN BRIEF

- Raises awareness of the importance of primary care dentists determining a patient's risk of bisphosphonate-related osteonecrosis of the jaw (BRONJ) before bone-impacting dental treatments.
- Provides evidence suggesting that dentists need more support to revise and update their practice relating to BRONJ to ensure it is consistent with best practice recommendations.

COMMENTARY

This publication is very timely. There are new families of drugs (denosumab, bevacizumab, sunitinib) being introduced or on trial that also cause osteonecrosis but through different mechanisms to bisphosphonates. Bisphosphonates are not the only problem!

The trend in cancer care is to turn cancer into a chronic illness. This means the pool of patients at risk of osteonecrosis within the population will increase and in anticipation we at Guy's have set up a 'Damaged Bone Unit' to study this at-risk group and how best to manage the at-risk population. The manufacturers of denosumab have taken a different approach this time and have made public the risk their drug carries with respect to osteonecrosis of the jaws. Jaw necrosis is now a recognised risk of cancer treatment but the relevance

to the dental profession is that the condition can be precipitated by poor dental care. Responsibility for minimising the risk of necrosis now shifts. It is vital that these patients receive appropriate and timely dental treatment both prior to starting drug treatment and during maintenance therapy. Many of these patients will require a lifetime of careful dental care. The hospital dental services are not designed to meet this demand for care so these recent drugs introduce a new dimension to general dental practice. Timely and appropriate dental care for these at risk cancer patients is now the order of the day. This responsibility has not been accepted to date but I cannot see how it can be avoided in future.

Mark McGurk

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AUTHOR QUESTIONS AND ANSWERS**1. Why did you undertake this research?**

Our team provides guidance for primary care dentists. We are therefore extremely interested in encouraging and supporting primary care dentists to incorporate guidance best practice recommendations into their everyday care of patients. Conducting this study, and studies like it, enables us to further an understanding of how guidance can be better translated into routine practice.

2. What would you like to do next in this area to follow on from this work?

The results of this study showed that further intervention is necessary to encourage recommended practice for managing patients on bisphosphonates. Applying a theoretical framework to identify and assess beliefs which may be driving the performing of guidance-recommended behaviours made it possible to suggest theoretically informed interventions based on study results. The next step is to implement the intervention(s) in a system wide, randomised controlled trial.